

Currently Pending Claims

1. A cell culture medium comprising at least one non-animal or plant-derived peptide, with the proviso that said peptide is not derived from wheat, wherein said medium
5 is capable of supporting the cultivation of an animal cell *in vitro*.

2. A cell culture medium comprising at least one non-animal derived or plant-derived lipid or at least one non-animal or plant-derived fatty acid, wherein said medium is capable of supporting the cultivation of an animal cell *in vitro*.

10 3. The cell culture medium of claim 1, wherein said medium further comprises at least one non-animal or plant-derived lipid or at least one non-animal or plant-derived fatty acid.

15 4. The cell culture medium of claim 1, said medium further comprising at least one ingredient selected from the group of ingredients consisting of at least one amino acid, at least one vitamin, at least one inorganic salt, at least one trace element, at least one plant lipid or fatty acid, adenine sulfate, ATP, deoxyribose, ethanolamine, D-glucose, glutathione, N-[2-hydroxyethyl]piperazine-N'-[2-ethanesulfonic acid] (HEPES), hypoxanthine, linoleic
20 acid, lipoic acid, insulin, phenol red, phosphoethanolamine, putrescine, sodium pyruvate, thymidine, uracil and xanthine.

5. The cell culture medium of claim 2, said medium further comprising at least one ingredient selected from the group of ingredients consisting of at least one amino acid,

at least one vitamin, at least one inorganic salt, at least one trace element, at least one plant lipid or fatty acid, adenine sulfate, ATP, deoxyribose, ethanolamine, D-glucose, glutathione, N-[2-hydroxyethyl]piperazine-N'-[2-ethanesulfonic acid] (HEPES), hypoxanthine, linoleic acid, lipoic acid, insulin, phenol red, phosphoethanolamine, putrescine, sodium pyruvate, thymidine, uracil and xanthine.

6. A cell culture medium obtained by combining at least one non-animal or plant-derived peptide together with an animal cell culture medium, with the proviso that said plant-derived peptide is not derived from wheat, wherein said medium is capable of supporting the cultivation of an animal cell *in vitro*.

7. A cell culture medium obtained by combining at least one non-animal or plant-derived lipid or at least one non-animal or plant-derived fatty acid together with an animal cell culture medium, wherein said medium is capable of supporting the cultivation of an animal cell *in vitro*.

8. The cell culture of claim 2, wherein said lipid or fatty acid is selected from the group consisting of palmitate, stearate, olcate, linoleate, linolenate, arachidate, myristate, behenate, erucate, lignocerate, caprylate, caprate, laurate and palmitoleate, and combinations thereof.

9. The cell culture of claim 7, wherein said lipid or fatty acid is selected from the group consisting of palmitate, stearate, olcate, linoleate, linolenate, arachidate, myristate,

behenate, erucate, lignocerate, caprylate, caprate, laurate and palmitoleate, and combinations thereof.

10. The cell culture medium of any one of claims 2 and 7, wherein said lipid is
5 a sterol.

11. The cell culture medium of claim 10, wherein said sterol is selected from the
group consisting of brassicasterol, campesterol, desmosterol, ergosterol, fucosterol,
lanosterol, stigmasterol, sitosterol, stigmasterol and stigmasterol acetate.

12. The cell culture medium of claim 1, wherein said animal cell is selected from
the group of animal cells consisting of an insect cell, an avian cell, a mammalian cell and
a fish cell.

13. The cell culture medium of claim 2, wherein said animal cell is selected from
the group of animal cells consisting of an insect cell, an avian cell, a mammalian cell and
a fish cell.

14. A method of cultivating an animal cell comprising the steps of:
20 (a) contacting said animal cell with the cell culture medium of claim 1;
and
(b) cultivating said animal cell under conditions suitable to support
cultivation of said animal cell.

15. A method of cultivating an animal cell comprising the steps of:

(a) contacting said animal cell with the cell culture medium of claim 6;

and

(b) cultivating said animal cell under conditions suitable to support

5 cultivation of said animal cell.

16. A method of cultivating an animal cell comprising the steps of:

(a) contacting said animal cell with the cell culture medium of claim 2;

and

(b) cultivating said animal cell under conditions suitable to support

10 cultivation of said animal cell.

17. A method of cultivating an animal cell comprising the steps of:

(a) contacting said animal cell with the cell culture medium of claim 7;

15 and

(b) cultivating said animal cell under conditions suitable to support

cultivation of said animal cell.

18. A composition comprising the cell culture medium of claim 1 and one or

20 more animal cells.

19. A composition comprising the cell culture medium of claim 6 and one or

more animal cells.

20. A composition comprising the cell culture medium of claim 2 and one or more animal cells.

5 26. A kit for replacing one or more animal-derived ingredients in a cell culture medium, comprising at least one non-animal or plant-derived peptide, lipid, fatty acid, or combinations thereof.

10 27. The cell culture medium of claim 1, wherein the non-animal or plant-derived peptide is derived from any one of the bacteria, fungi, yeast, rice, soy, potato, corn and aloe vera.

15 28. The cell culture medium of claim 2, wherein the non-animal or plant-derived lipid or fatty acid is derived from any one of bacteria, fungi, yeast, rice, soy, potato, corn and aloe vera.

29. (New) The cell culture medium of claim 8, wherein said lipid or fatty acid is selected from the group consisting of myristate, behenate, erucate, lignocerate, caprylate, caprate, laurate, stearate, oleate and combinations thereof.

20 30. (New) The cell culture medium of claim 8, wherein said lipid or fatty acid is selected from the combination comprising myristate, caprylate, caprate, laurate, stearate, oleate, palmitate and linoleate.

31. (New) The cell culture medium of claim 9, wherein said lipid or fatty acid is selected from the group consisting of myristate, behenate, erucate, lignocerate, caprylate, caprate, laurate, stearate, oleate and combinations thereof.

5 32. (New) The cell culture medium of claim 9, wherein said lipid or fatty acid is selected from the combination comprising myristate, caprylate, caprate, laurate, stearate, oleate, palmitate and linoleate.

10 33. (New) The cell culture medium of claim 1, wherein the non-animal or plant derived peptide is derived from any one of bacteria, soy, rice, potato, corn and aloe vera.

34. (New) The cell culture medium of claim 1, wherein the non-animal or plant derived peptide is derived from any one of soy, rice, potato, corn and aloe vera.

15 35. (New) The cell culture medium of claim 1, wherein the non-animal or plant derived peptide is derived from any one of rice, potato, corn and aloe vera.

20 36. (New) The cell culture medium of claim 1, wherein the non-animal or plant derived lipid or fatty acid is derived from any one of bacteria, soy, rice, potato, corn and aloe vera.

37. (New) The cell culture medium of claim 1, wherein the non-animal or plant derived lipid or fatty acid is derived from any one of soy, rice, potato, corn and aloe vera.

38. (New) The cell culture medium of claim 1, wherein the non-animal or plant derived lipid or fatty acid is derived from any one of rice, potato, corn and aloe vera.